

AD-A100 527

ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/6 4/2
20401A ASSAULT BREAKER; MISSILE NUMBER 0002; ROUND NUMBER M161.(U)

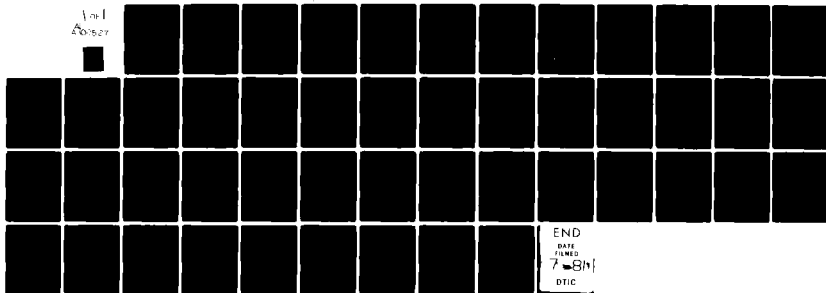
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DR 1176
May 1981

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METEOROLOGICAL DATA REPORT

20401A Assault Breaker
Missile No. 0002
Round No. M1G1
1 May 1981

by

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AVN 349-9568

DTIC
JUN 23 1981
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ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

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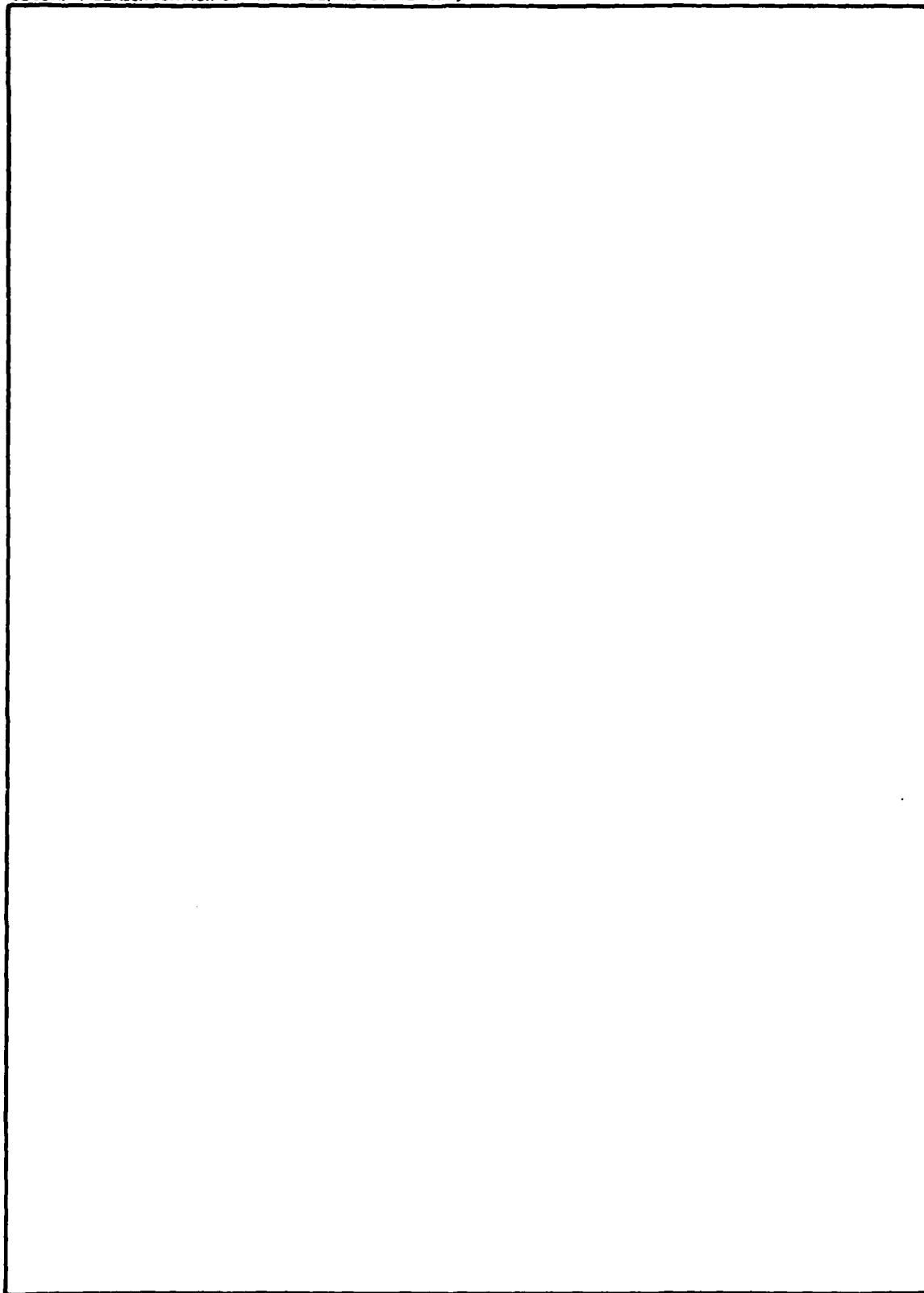
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 20401A Assault Breaker, Missile Number 0002, Round Number MIG1 presented in tabular form.		

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)



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INTRODUCTION

20401A Assault Breaker, Missile Number 0002, Round Number M1G1, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 0918 MDT, on 01 May 1981. The scheduled launch time was 0915 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the LC-33 Met Site at T-0 minutes.

(2) Anemometer data were provided from existing pole-mounted and tower-mounted anemometers at LC-33. Monitor of wind speed and direction from one anemometer was also provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from Single Theodolite pibal observations at:

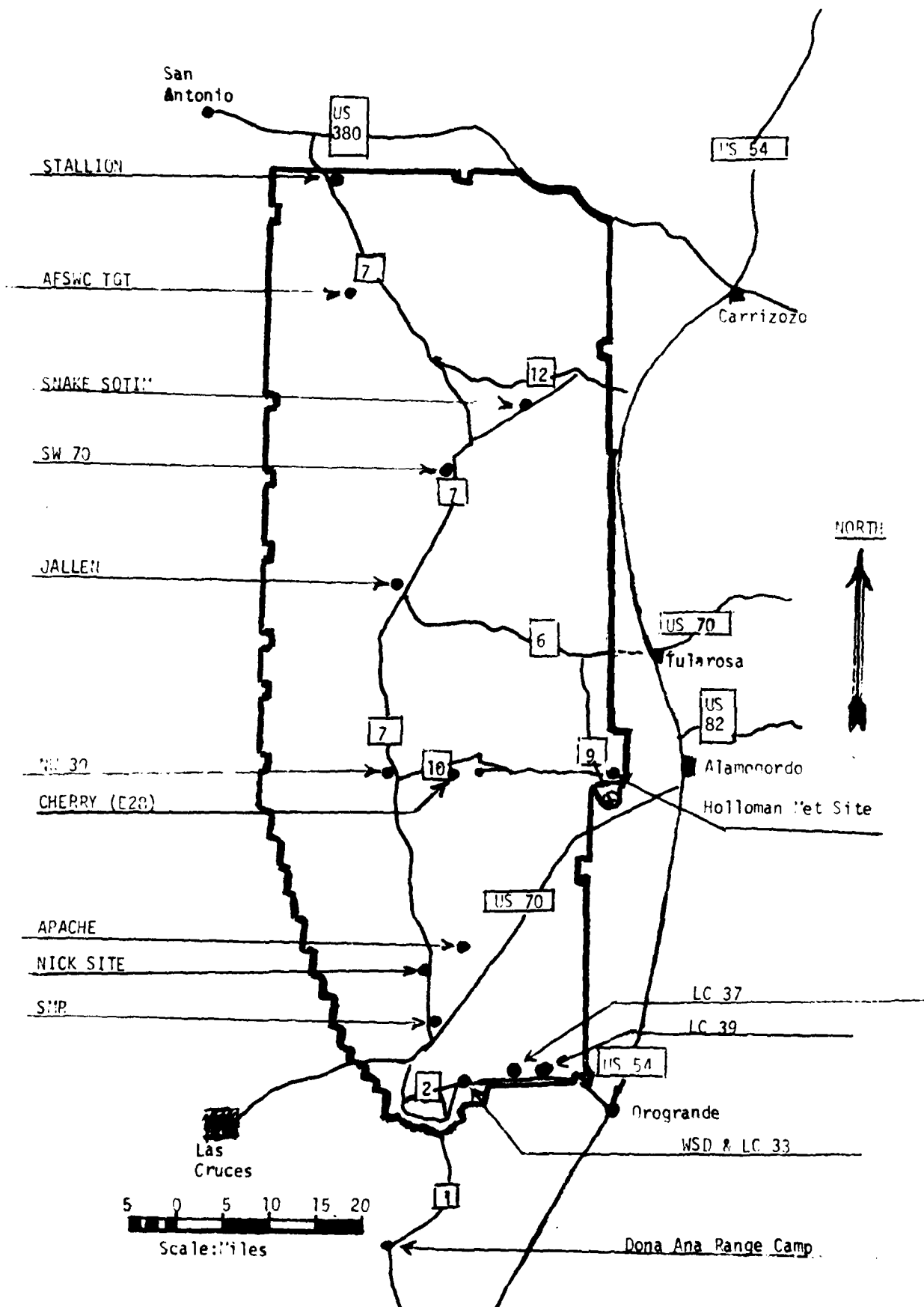
SITE AND ALTITUDE

LC-33 2760 Meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites:

SITE AND TIME

JAL	0645 MDT
LC-37	0815 MDT
HM S	0815 MDT
WSD	0918 MDT
JAL	0925 MDT



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TABLE 1. Surface Observations taken at 0918 MDT,
1 May 1981, at LC-33, 20401A Assault
Breaker, Missile Number 0002, Round
Number M1G1.

ELEVATION	3983	FEET
PRESSURE	881.1	MM
TEMPERATURE	20.7	DEGREES C
RELATIVE HUMIDITY	56	PERCENT
DEW POINT	11.7	DEGREES C
DENSITY	1038	KG/M3
WIND SPEED	03	KNOTS
WIND DIRECTION	159	DEGREES
CLOUD COVER	3/CU/6000 1st Layer AMT/TYPE/HGT 1/AC/12000 2nd Layer AMT/TYPE/HGT	

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TABLE 2

LC-33 FIXED POLE ANEMOMETER MEASURED WIND

20401A Assault Breaker, Missile No. 0002, Round No. M1G1,
1 May 1981, at 0918 MDT.

POLE #1 X485,874.29 Y185,958.90 H4018.74 38.7 ft. AGL			POLE #2 X485,874.93 Y185,912.95 H4033.57 53.0 ft. AGL			POLE #3 X485,877.25 Y185,916.95 H4062.97 77.6 ft. AGL		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG		T-TIME SEC	DIR DEG	
T-30	157	03	T-30	141	02	T-30	171	03
T-20	157	04	T-20	147	02	T-20	153	04
T-10	157	03	T-10	148	02	T-10	139	04
T0.0	156	04	T0.0	149	02	T0.0	135	04
T+10	146	04	T+10	147	02	T+10	137	03

TABLE 3

LC-33 METEOROLOGICAL TOWER ANEMOMETER MEASURED WIND (44 FT. TOWER)

LEVEL #1, 12 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #2, 42 FEET X484,982.64, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
T-30	165	03	T-30	162	04
T-20	160	03	T-20	162	04
T-10	159	03	T-10	163	05
T0.0	159	03	T0.0	166	04
T+10	162	03	T+10	157	04

LEVEL #3, 102 FEET X484,982.64, Y185,057.73, H3983.00 (base)			LEVEL #4, 102 FEET X484,982.64, Y185,057.73, H3983.00 (base)		
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
T-30	173	04	T-30	171	05
T-20	173	04	T-20	171	05
T-10	176	06	T-10	171	05
T0.0	180	05	T0.0	171	04
T+10	180	04	T+10	168	03

PROJECT SURFACE OBSERVATION

TABLE 4									
STATION JALLEN									
DATE 01 DAY 1981		DAY MONTH YEAR		X= 450.491.60		Y= 464.023.05		H= 4053.0	
TIME M D J	PRESSURE mbs	TEMPERATURE OF °C	DEW POINT OF °C	RELATIVE HUMIDITY %	DENSITY gm/m ³	DIPECTION degs	WIND SPEED kts	CHARACTER kts	VISIBIL-ITY
0845	876.0	23.0	08.9	41	1024	040	06		35
0918	876.4	24.0	09.8	40	1019	010	10		35
0945	876.7	23.8	09.4	40	1021	040	06		35

OBSTRUCTIONS TO VISIBILITY	CLOUDS						REMARKS		
	1st LAYER		2nd LAYER		3rd LAYER				
	AMT	TYPE	HGT	AMT	TYPE	HGT			
	1	CU	5,000	1	AC	14,000	1	CS	23,000
	2	CU	5,000	3	AC	14,000			
	1	CU	5,000	3	AC	14,000			

PSYCHROMETRIC COMPUTATION

TIME:	0845	0915	0945
DRY BULB TEMP.	23.0	24.0	23.8
WET BULB TEMP.	14.3	15.1	14.8
WET BULB DEPR.	08.7	08.9	09.0
DEW POINT	08.9	09.8	09.4
RELATIVE HUMID.	41	40	40

PILOT BALLOON MEASURED WIND DATA

TABLE 6

RELEASED FROM LC-33 E&A

DATE 01 MAY 1981

TIME 0918 MDT

COORDINATES (WSTM) 485,135.76

185,919.24

3988.57

NOTE: WIND DIRECTIONS ARE REFERENCED TO

HEIGHTS ARE METERS AGL X OR FEET AGL

HEIGHT AGL	DIRECTION DEGREES	SPEED KTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KTS	HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
sfc	159	03	1860	110	11			
60	MISG	MISG	1920	117	11			
120	120	02	1980	130	09			
180	161	03	2040	120	09			
240	161	05	2100	125	10			
300	154	06	2160	113	11			
360	153	04	2220	109	09			
420	110	06	2280	110	13			
480	109	06	2340	109	11			
540	099	08	2400	134	11			
600	115	11	2460	143	08			
660	098	13	2520	130	10			
720	082	08	2580	142	08			
780	104	11	2640	142	09			
840	095	13	2700	143	07			
900	092	14	2760	127	08			
960	094	14						
1020	088	14						
1080	096	19						
1140	097	22						
1200	101	20						
1260	099	21						
1320	096	23						
1380	097	22						
1440	100	21						
1500	102	22						
1560	101	19						
1620	105	19						
1680	113	16						
1740	120	16						
1800	109	12						

AIMING COMPUTER MET MESSAGE
1 May 1981

JAL 0645 MDT
METCM1332065
010680124872
00018003 28960872
01044019 29240862
02052029 29280837
03071013 28950799
04159008 28610753
05258009 28300709
06315013 27910667
07250012 27510628
08228018 27090590
09236022 26690553
10239023 26330519
11296018 25950486
12310022 25320440
13360020 24800384

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

SIGNIFICANT LEVEL DATA
12100.50027
JALLEN

TABLE 8

STATION ALTITUDE 4051.00 FEET MSL
1 MAY 81 0645 HRS MDT
ASCENSION NO. 27

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
872.0	15.2	5.7	53.0
861.8	18.6	8.3	51.0
850.0	19.2	8.5	50.0
774.8	13.0	5.7	61.0
716.0	9.4	2.9	64.0
700.0	8.0	.7	60.0
632.4	1.7	-4.6	63.0
595.6	-2.3	-4.0	88.0
579.0	-4.5	-5.3	94.0
511.4	-11.2	-12.4	91.0
500.0	-12.2	-17.4	65.0
470.4	-16.0	-21.4	63.0
459.0	-18.3	-29.1	38.0
415.8	-22.8	-32.6	40.0
400.0	-23.5	-36.5	29.0
393.8	-23.7	-35.7	32.0
324.8	-34.0	-46.1	28.0
304.8	-37.6	-49.3	28.0

STATION ALTITUDE 4051.00 FEET MSL
1 MAY 81 0645 HRS MDT
ASCENSION NO. 27

UPPER AIR DATA
1210030027
JALLEN
TABLE 9

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4051.0	872.0	15.2	5.7	53.0	1049.3	662.9	10.0	3.1	1.000276
4500.0	858.2	18.8	8.4	50.7	1019.1	667.3	26.5	6.8	1.000276
5000.0	843.0	18.6	8.3	51.0	1001.5	667.1	31.6	11.2	1.000272
5500.0	828.1	17.5	7.8	53.1	987.9	665.7	33.8	15.6	1.000268
6000.0	813.4	16.3	7.3	55.2	974.5	664.3	35.8	17.5	1.000263
6500.0	799.0	15.1	6.7	57.3	961.3	662.9	41.3	13.0	1.000259
7000.0	784.8	13.9	6.1	59.5	948.3	661.5	51.8	9.8	1.000255
7500.0	770.8	12.8	5.5	61.2	935.1	660.2	67.7	8.3	1.000250
8000.0	758.9	11.9	4.9	61.9	921.0	659.2	80.3	8.5	1.000246
8500.0	743.3	11.1	4.2	62.6	907.1	658.2	87.0	9.5	1.000241
9000.0	729.9	10.3	3.6	63.3	893.4	657.2	103.9	8.8	1.000236
9500.0	716.7	9.4	3.0	64.0	880.0	656.2	126.9	8.6	1.000232
10000.0	703.7	8.3	1.2	60.9	867.8	654.8	159.4	10.1	1.000225
10500.0	690.8	7.2	.0	60.4	855.5	653.4	174.9	12.5	1.000220
11000.0	678.0	6.0	-9.9	60.9	843.4	652.0	178.5	13.3	1.000216
11500.0	665.5	4.9	-1.9	61.5	831.4	650.6	175.2	12.9	1.000211
12000.0	653.2	3.7	-2.9	62.0	819.6	649.2	165.7	12.0	1.000207
12500.0	641.2	2.6	-3.8	62.6	807.9	647.7	154.3	11.7	1.000203
13000.0	629.3	1.4	-4.5	65.1	796.4	646.3	142.7	11.9	1.000200
13500.0	617.4	.1	-4.2	73.0	785.0	644.9	135.5	13.3	1.000198
14000.0	605.8	-1.2	-4.0	80.9	773.7	643.4	130.5	15.0	1.000196
14500.0	594.4	-2.5	-4.1	88.4	762.8	641.9	128.8	17.1	1.000193
15000.0	583.1	-3.9	-5.0	92.5	752.5	640.1	128.1	19.0	1.000190
15500.0	571.9	-5.2	-6.0	93.7	741.5	638.6	129.7	20.2	1.000186
16000.0	560.8	-6.2	-7.1	93.2	730.2	637.3	131.1	21.3	1.000182
16500.0	550.0	-7.3	-8.2	92.8	719.0	636.0	132.5	22.2	1.000178
17000.0	539.4	-8.3	-9.3	92.3	708.0	634.6	132.6	22.9	1.000174
17500.0	528.9	-9.4	-10.5	91.8	697.2	633.3	132.0	23.4	1.000170
18000.0	518.7	-10.4	-11.6	91.3	686.5	632.0	134.0	22.5	1.000167
18500.0	508.6	-11.4	-13.5	84.7	676.0	630.7	139.8	21.2	1.000163
19000.0	498.6	-12.4	-17.6	64.9	665.3	629.5	151.6	19.2	1.000157
19500.0	488.7	-13.6	-18.9	64.3	655.3	627.9	162.0	18.8	1.000154
20000.0	479.1	-14.9	-20.2	63.6	645.5	626.4	167.3	19.8	1.000151
20500.0	469.6	-16.2	-21.9	61.2	636.0	624.8	170.3	21.4	1.000148
21000.0	460.1	-18.1	-28.2	40.5	628.1	622.4	172.2	23.3	1.000143
21500.0	450.8	-19.1	-29.7	38.4	617.9	621.1	176.7	23.4	1.000141
22000.0	441.6	-20.1	-30.4	38.8	607.6	619.9	178.9	22.9	1.000138
22500.0	432.7	-21.0	-31.2	39.2	597.5	618.8	175.8	21.1	1.000136
23000.0	423.9	-21.9	-31.9	39.6	587.5	617.6	176.6	19.8	1.000133
23500.0	415.2	-22.8	-32.7	37.6	577.7	616.5	160.7	18.7	1.000131

STATION ALTITUDE 4051.00 FEET MSL
1 MAY 81 0645 HRS MDT
ASCENSION NO. 27

UPPER AIR DATA
1210030027
JALLEN
TABLE 9 CON'T

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	406.7	-23.2	33.7	566.7	616.0	194.7	17.9	1.000128
24500.0	398.4	-23.6	29.8	555.9	615.6	204.7	17.9	1.000125
25000.0	390.1	-24.2	31.8	545.7	614.8	206.6	17.8	1.000123
25500.0	381.9	-25.3	31.4	536.7	613.3	204.2	18.8	1.000121
26000.0	373.9	-26.5	30.9	527.9	611.9	200.0	20.6	1.000119
26500.0	366.0	-27.6	30.5	519.2	610.5	203.3	23.5	1.000117
27000.0	358.3	-28.7	30.0	510.7	609.1	206.0	26.1	1.000115
27500.0	350.8	-29.9	29.6	502.3	607.7	203.3	23.3	1.000113
28000.0	343.4	-31.0	29.2	494.0	606.3	202.2	22.7	1.000111
28500.0	336.2	-32.2	28.7	485.9	604.8	208.1	31.6	1.000109
29000.0	329.2	-33.3	28.3	478.0	603.4	210.7	40.5	1.000107
29500.0	322.2	-34.5	28.0	470.2	601.9	211.2	49.1	1.000105
30000.0	315.2	-35.7	28.0	462.4	600.3			1.000104
30500.0	306.4	-36.9	28.0	454.8	598.8			1.000102

STATION ALTITUDE 4051.00 FEET MSL
1 MAY 81
ASCENSION NO. 2

MANDATORY LEVELS
1210030027
JALLEN

TABLE 10

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES(TN)	SPEED KNOTS	
850.0	4767.	19.2	8.5	50.	29.8	9.2	
800.0	6466.	15.1	6.7	57.	40.8	13.3	
750.0	8250.	11.5	4.6	62.	83.9	9.0	
700.0	10134.	8.0	.7	60.	166.1	10.9	
650.0	12126.	3.4	-3.1	62.	162.9	11.9	
600.0	14239.	-1.8	-4.0	85.	129.6	16.1	
550.0	16490.	-7.3	-8.2	93.	132.5	22.2	
500.0	18906.	-12.2	-17.4	65.	149.7	19.5	
450.0	21515.	-19.2	-29.8	38.	177.1	23.4	
400.0	24362.	-23.5	-36.5	29.	204.3	17.9	
350.0	27528.	-30.0	-42.0	30.	202.9	23.0	

STATION ALTITUDE 4051.37 FEET MSL
 1 MAY 51 0815 HRS MDT
 ASCENSION NO. 63

SIGNIFICANT LEVEL DATA
 1210140003
 LC-37
 TABLE 11

GEODETIC COORDINATES
 32.40175 LAT DEG
 106.31232 LON DEG

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
878.9	18.5	11.1	62.0
876.2	16.7	8.9	60.0
860.7	18.0	9.1	56.0
850.0	17.1	8.3	56.0
828.2	15.5	7.3	58.0
809.0	14.8	6.1	56.0
798.4	15.0	6.6	57.0
742.2	9.7	4.5	70.0
700.0	6.2	.1	65.0
688.0	5.6	1.2	73.0
652.2	2.5	-2.4	70.0
625.8	.8	-5.8	61.0
609.0	-.8	-6.7	64.0
575.2	-4.7	-10.6	63.0
550.4	-6.7	-12.9	61.0
525.8	-9.6	-15.9	60.0
500.0	-12.6	-26.2	31.0
477.8	-15.4	-27.0	36.0
462.2	-15.9	-31.3	25.0
400.0	-24.0	-41.0	19.0
369.2	-29.3	-45.5	19.0
345.5	-31.3	-42.5	32.0
335.0	-32.5	-44.1	30.0
300.0	-38.4	-50.0	28.0
259.3	-46.6		
250.0	-48.3		

STATION ALTITUDE 4051.37 FEET MSL
1 MAY 81 0315 HRS MDT
ASCENSION NO. 63

UPPER AIR DATA
1210180063
LC-37

TABLE 12

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
4051.4	870.9	18.5	11.1	62.0	1043.8	667.2	45.0	6.0	1.000292
4500.0	865.0	17.6	9.1	57.1	1031.0	666.0	66.8	6.6	1.000281
5000.0	849.7	17.1	8.2	56.0	1015.0	665.3	84.8	8.1	1.000275
5500.0	834.7	16.0	7.6	57.4	1000.9	664.0	96.3	10.1	1.000270
6000.0	819.8	15.2	6.8	57.1	986.0	663.0	102.1	12.7	1.000265
6500.0	805.3	14.9	6.3	56.4	969.6	662.6	102.6	16.0	1.000260
7000.0	790.9	14.3	6.3	58.7	954.0	662.0	103.1	18.0	1.000257
7500.0	776.7	13.0	5.9	61.9	941.3	660.5	103.6	19.2	1.000253
8000.0	762.7	11.7	5.4	65.1	928.7	659.0	102.6	18.5	1.000249
8500.0	749.0	10.4	4.8	68.4	916.3	657.4	102.3	17.5	1.000245
9000.0	735.5	9.2	3.8	69.2	903.8	655.9	103.6	15.1	1.000240
9500.0	722.0	8.1	2.4	67.6	891.1	654.5	106.4	12.7	1.000233
10000.0	708.9	7.0	1.1	66.1	878.5	653.2	117.4	10.3	1.000228
10500.0	695.9	6.0	.5	67.7	865.5	652.0	127.4	8.7	1.000224
11000.0	683.1	5.2	.7	72.6	851.9	651.1	135.0	7.7	1.000221
11500.0	670.4	4.1	-6	71.5	839.6	649.8	134.1	7.3	1.000216
12000.0	658.0	3.0	-1.8	70.5	827.5	648.4	128.3	8.1	1.000211
12500.0	645.8	2.1	-3.2	67.9	815.1	647.2	121.3	10.2	1.000206
13000.0	633.7	1.3	-4.8	63.7	802.3	646.2	117.8	13.6	1.000200
13500.0	621.9	.4	-6.0	61.7	790.0	645.1	110.9	17.0	1.000196
14000.0	610.2	-7	-6.7	63.8	778.4	643.8	119.9	19.6	1.000192
14500.0	598.6	-2.0	-7.9	63.7	767.4	642.2	122.8	21.6	1.000188
15000.0	587.3	-3.3	-9.2	63.4	756.6	640.6	125.8	23.0	1.000184
15500.0	576.1	-4.6	-10.5	63.0	746.0	639.0	129.7	23.0	1.000181
16000.0	565.1	-5.5	-11.6	62.2	734.2	637.9	134.1	22.6	1.000177
16500.0	554.2	-6.4	-12.6	61.3	722.6	636.8	138.3	19.6	1.000173
17000.0	543.5	-7.5	-13.8	60.7	711.7	635.4	143.4	17.0	1.000170
17500.0	533.0	-8.7	-15.0	60.3	701.3	633.9	149.0	15.1	1.000167
18000.0	522.6	-10.0	-16.9	56.5	691.0	632.4	153.8	14.2	1.000163
18500.0	512.4	-11.1	-20.7	45.1	680.7	630.9	171.0	14.9	1.000158
19000.0	502.3	-12.3	-25.0	33.7	670.5	629.4	180.0	17.2	1.000154
19500.0	492.4	-13.5	-26.4	32.7	660.4	627.9	185.4	20.2	1.000151
20000.0	482.6	-14.8	-26.8	34.9	650.4	626.4	184.4	24.1	1.000146
20500.0	473.1	-15.6	-28.2	32.7	639.4	625.4	183.1	27.0	1.000142
21000.0	463.6	-16.9	-30.9	26.0	627.5	625.0	181.4	29.0	1.000140
21500.0	454.2	-18.0	-32.5	24.3	617.3	623.8	181.5	28.3	1.000137
22000.0	445.0	-19.2	-33.8	23.4	607.5	622.4	182.1	27.1	1.000135
22500.0	436.0	-20.3	-35.2	22.6	597.9	620.9	183.5	26.1	1.000133
23000.0	427.2	-21.5	-36.5	20.9	588.4	619.5	185.0	25.5	1.000130
23500.0	418.5	-21.5	-37.9	20.9	579.1	618.1	185.4		

GEODETIC COORDINATES
32.40175 LAT DEG
106.51232 LONG DEG

UPPER AIR DATA
12101300003
LC-37

STATION ALTITUDE 4051.37 FEET MSL
1 MAY PI 0815 HRS WDT
ASCENSION NO. 63

TABLE 12 CONT

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (T)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	410.0	-22.6	20.0	570.0	616.7	190.1	24.3	1.000128
24500.0	401.7	-23.8	19.2	561.0	615.3	190.6	22.7	1.000126
25000.0	393.4	-25.1	19.0	552.3	613.7			1.000124
25500.0	385.2	-26.4	19.0	543.8	612.0			1.000122
26000.0	377.2	-27.8	19.0	535.4	610.3			1.000120
26500.0	369.3	-29.1	19.0	527.1	608.6			1.000118
27000.0	361.5	-29.9	22.7	517.6	607.7			1.000116
27500.0	353.9	-30.5	27.1	508.1	606.8			1.000114
28000.0	346.4	-31.2	31.5	498.7	606.0			1.000112
28500.0	339.0	-32.0	30.8	489.8	605.0			1.000110
29000.0	331.8	-33.0	29.8	481.3	603.7			1.000108
29500.0	324.6	-34.2	29.4	473.2	602.3			1.000106
30000.0	317.6	-35.3	29.0	465.3	600.8			1.000104
30500.0	310.8	-36.5	28.6	457.5	599.3			1.000102
31000.0	304.1	-37.7	28.2	449.8	597.8			1.000101
31500.0	297.4	-38.9	26.3**	442.3	596.3			1.000099
32000.0	290.8	-40.1	22.0**	434.8	594.7			1.000097
32500.0	284.4	-41.4	17.7**	427.5	593.1			1.000095
33000.0	278.0	-42.7	13.4**	420.2	591.4			1.000094
33500.0	271.9	-43.9	9.1**	413.2	589.8			1.000092
34000.0	265.8	-45.2	4.8**	406.2	588.2			1.000091
34500.0	259.9	-46.5	.5**	399.4	586.5			1.000089
35000.0	254.0	-47.6		392.3	585.1			1.000087

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.37 FEET MSL
1 MAY 81
ASCENSION 00. 63
0815 HRS NDT

MANDATORY LEVELS
1210180063
LC-37

GEODETIC COORDINATES
32.40175 LAT DEG
106.31232 LON DEG

TABLE 13

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4987.	17.1	8.3	50.	84.4	8.1
800.0	6677.	15.0	6.5	57.	102.7	17.2
750.0	8458.	10.5	4.8	68.	102.2	17.7
700.0	10332.	6.2	.1	65.	124.9	9.1
650.0	12315.	2.4	-2.7	69.	123.4	9.4
600.0	14425.	-1.8	-7.8	64.	122.3	21.5
550.0	16675.	-6.7	-13.0	61.	140.2	16.6
500.0	19001.	-12.6	-26.2	31.	181.5	17.8
450.0	21704.	-17.4	-33.1	24.	181.7	28.7
400.0	24562.	-24.0	-41.0	19.	191.0	22.4
350.0	27709.	-30.9	-42.9	29.		
300.0	31246.	-38.4	-50.0	28.		
250.0	35270.	-48.3				

STATION ALTITUDE 4051.00 F-ET MSL
1 MAY 81
ASCENSION NO. 280815 HRS JDT

SIGNIFICANT LEVEL DATA
1210030028
JALLEN
TABLE 14

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

PRESSURE	GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
875.9	4051.0	20.8	51.0
850.0	4900.3	18.2	54.0
807.6	6333.5	15.0	59.0
798.0	6666.5	15.0	57.0
768.2	7722.1	12.7	61.0
700.0	10263.8	6.9	71.0
665.6	11620.1	3.9	91.0
657.0	11967.9	3.4	82.0
647.8	12344.3	2.9	72.0
595.8	14554.6	-2.0	80.0
587.2	14934.9	-2.4	80.0
561.8	16084.2	-5.3	78.0
520.6	18037.6	-9.3	64.0
500.0	19060.5	-11.5	58.0
480.6	20056.0	-13.0	47.0
473.2	20444.1	-14.3	42.0
465.6	20847.7	-14.8	32.0
458.0	21257.4	-15.0	28.0
406.8	24165.4	-22.3	36.0
400.0	24573.2	-22.1	35.0
358.6	27180.1	-29.2	32.0
345.0	28085.3	-31.4	32.0
325.8	29413.4	-33.8	32.0

STATION ALTITUDE 4051.00 FEET MSL
1 MAY 81 0815 HRS MDT
ASCENSION NO. 28

UPPER AIR DATA
1210030028
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

TABLE 15

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
4051.0	875.9	20.8	51.0	1032.4	669.7	360.0	9.9	1.000285
4500.0	862.1	19.4	52.6	1021.2	668.1	27.6	9.1	1.000280
5000.0	847.0	18.0	54.3	1008.4	666.4	56.2	10.7	1.000275
5500.0	832.0	16.9	56.1	994.5	665.1	74.0	14.2	1.000270
6000.0	817.3	15.7	57.8	980.8	663.8	84.4	17.9	1.000266
6500.0	802.8	15.0	59.0	966.0	662.9	92.6	19.8	1.000260
7000.0	788.5	14.3	58.3	951.3	662.0	97.9	19.9	1.000256
7500.0	774.4	13.2	60.2	937.9	660.7	101.2	16.4	1.000251
8000.0	760.4	12.1	62.1	924.8	659.4	99.8	12.4	1.000247
8500.0	746.6	10.9	64.1	911.7	658.0	88.7	8.0	1.000242
9000.0	733.1	9.8	66.0	898.9	656.7	85.7	7.8	1.000238
9500.0	719.8	8.6	68.0	886.3	655.3	86.5	8.4	1.000234
10000.0	706.8	7.5	70.0	873.9	653.9	91.7	8.4	1.000230
10500.0	693.9	6.4	74.5	861.4	652.6	97.6	8.1	1.000227
11000.0	681.1	5.3	81.9	848.8	651.4	111.8	6.5	1.000225
11500.0	668.6	4.2	89.2	836.4	650.1	134.9	5.9	1.000223
12000.0	656.2	3.4	81.1	823.7	649.0	159.9	7.3	1.000215
12500.0	644.0	2.6	72.6	811.2	647.9	173.0	8.6	1.000207
13000.0	631.9	1.4	74.4	799.3	646.5	181.3	9.6	1.000203
13500.0	620.1	.3	76.2	787.5	645.2	171.0	10.3	1.000200
14000.0	608.4	-.8	78.0	776.0	643.9	159.7	11.6	1.000196
14500.0	597.0	-1.9	79.8	764.6	642.5	150.0	15.4	1.000192
15000.0	585.7	-2.6	79.9	752.1	641.7	145.9	18.8	1.000188
15500.0	574.6	-3.8	79.0	741.4	640.1	146.5	20.8	1.000184
16000.0	563.6	-5.1	78.1	730.9	638.5	148.0	21.9	1.000180
16500.0	552.8	-6.2	75.0	719.8	637.2	130.2	22.2	1.000176
17000.0	542.1	-7.2	71.4	708.8	635.9	153.8	22.0	1.000172
17500.0	531.6	-8.2	67.9	697.9	634.6	157.3	21.8	1.000168
18000.0	521.4	-9.2	64.3	687.2	633.4	160.3	21.7	1.000164
18500.0	511.2	-10.3	61.3	676.6	632.0	162.0	22.7	1.000160
19000.0	501.2	-11.4	58.4	666.2	630.7	162.8	24.1	1.000157
19500.0	491.3	-12.2	53.1	655.2	629.7	166.1	25.5	1.000153
20000.0	481.7	-12.9	47.6	644.2	628.7	169.0	26.9	1.000150
20500.0	472.1	-14.4	40.6	635.2	628.9	172.3	27.4	1.000146
21000.0	462.8	-14.9	30.5	623.9	626.2	174.6	27.8	1.000142
21500.0	453.5	-15.6	28.7	613.2	625.3	171.2	26.2	1.000140
22000.0	444.3	-16.9	30.0	603.7	623.8	166.9	24.3	1.000137
22500.0	435.4	-18.1	31.4	594.5	622.3	160.2	21.8	1.000135
23000.0	426.6	-19.4	32.8	585.5	620.7	157.2	20.2	1.000133
23500.0	418.0	-20.6	34.2	576.4	619.2	157.9	19.3	1.000131

UPPER AIR DATA
1210030028
JALLFN

STATION ALTITUDE 4051.00 FEET MSL
1 MAY 81 0815 HRS MDT
ASCENSION NO. 28

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

TABLE 15 CONT

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
							DIRECTION DEGREES (TN)	SPEED KNOTS	
4000.0	409.6	-21.9	-33.0	35.5	567.6	617.6	163.0	17.7	1.000129
24500.0	401.2	-22.1	-33.3	35.2	556.6	617.3	173.0	15.8	1.000126
25000.0	392.9	-23.3	-34.5	34.5	547.6	615.9	186.8	14.8	1.000124
25500.0	384.8	-24.6	-35.9	33.9	539.2	614.2	202.8	15.0	1.000122
26000.0	376.8	-26.0	-37.3	33.4	530.9	612.5	210.2	18.1	1.000120
26500.0	369.0	-27.3	-38.7	32.8	522.6	610.8	211.2	22.8	1.000118
27000.0	361.3	-28.7	-40.1	32.2	514.8	609.1	212.2	27.9	1.000116
27500.0	353.7	-30.0	-41.3	32.0	506.7	607.6	213.0	33.1	1.000114
28000.0	346.3	-31.2	-42.4	32.0	498.5	606.0	211.7	36.3	1.000112
28500.0	338.9	-32.1	-43.2	32.0	489.8	604.8			1.000110
29000.0	331.7	-33.1	-44.0	32.0	481.2	603.7			1.000108

STATION ALTITUDE 4051.00 FEET MSL
1 MAY 81 0815 HRS MDT
ASCENSION NO. 28

MANDATORY LEVELS
1210030020
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 16

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4897.	18.2	8.7	54.	51.2	10.2
800.0	6502.	15.0	6.7	57.	94.0	20.2
750.0	8376.	11.2	4.6	64.	92.4	9.1
700.0	10254.	6.9	2.0	71.	94.3	8.4
650.0	12241.	3.0	-1.1	74.	168.1	8.2
600.0	14355.	-1.6	-4.7	79.	152.1	14.3
550.0	16611.	-6.4	-10.2	74.	151.0	22.2
500.0	19035.	-11.5	-18.1	58.	163.1	24.3
450.0	21663.	-16.1	-29.9	29.	169.9	25.6
400.0	24534.	-22.1	-33.3	35.	174.4	15.6
350.0	27701.	-30.6	-41.8	32.	212.6	34.9

STATION ALTITUDE 4126.59 FEET MSL
1 MAY 81
ASCENSION NO. 77

SIGNIFICANT LEVEL DATA

1210010077

HOLLOMAN

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 17

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
875.6	18.9	8.6	51.0
865.8	19.7	8.1	47.0
850.0	19.7	8.1	47.0
759.2	13.3	3.4	51.0
740.6	11.7	2.5	53.0
712.0	8.8	3.4	69.0
700.0	7.6	2.3	69.0
647.4	3.0	-1.3	70.0
591.6	-3.1	-4.9	87.0
502.3	-2.4	-6.0	76.0
528.6	-8.2	-12.5	71.0
520.6	-8.5	-15.3	58.0
500.0	-11.2	-17.6	59.0
491.3	-12.2	-18.5	59.0
477.7	-13.2	-33.0	17.0
454.6	-15.8	-37.8	13.0
436.0	-18.0	-39.6	13.0
400.0	-22.4	-39.1	20.0
353.0	-30.0	-46.5	18.0
314.8	-35.5	-50.3	20.0
300.0	-37.8		
285.0	-41.3		
250.0	-48.0		
225.4	-53.2		
205.8	-54.2		
200.0	-55.1		
192.0	-56.7		
178.4	-58.0		
169.8	-58.0		
165.4	-59.3		
150.0	-62.2		
137.6	-67.1		
122.8	-64.5		
115.6	-64.2		
108.0	-67.0		
100.0	-64.7		
95.6	-68.0		
83.0	-66.2		
77.0	-67.3		
70.0			

GEODETIC COORDINATES
 32.88865 LAT DEG
 106.09965 LON DEG

SIGNIFICANT LEVEL DATA
 1210010077
 HOLLOMAN

TABLE 17 CON'T

STATION ALTITUDE 4126.59 FEET MSL
 1 MAY 81 0815 HRS MDT
 ASCENSION NO. 77

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE	REL. HUM.
MILLIBARS	MSL FEET	AIR DEWPOINT	PERCENT
		DEGREES CENTIGRADE	
62.6	63667.2	-68.1	
55.4	66115.8	-63.9	
53.3	66903.4	-61.1	
50.0	68212.4	-61.9	
43.2	71219.7	-59.3	

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

UPPER AIR DATA
1210010077
HOLLOMAN
TABLE 18

STATION ALTITUDE 4126.59 FEET MSL
1 MAY 81 0815 HRS MDT
ASCENSION NO. 77

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
4126.6	875.6	18.9	51.0	1039.4	667.4	21.0	27.2	1.000281
4500.0	864.1	19.7	47.0	1023.1	668.3	23.7	21.8	1.000276
5000.0	849.0	19.6	47.0	1005.3	668.2	30.5	14.7	1.000272
5500.0	833.9	18.6	47.7	991.1	667.0	49.8	8.2	1.000266
6000.0	819.2	17.6	48.3	977.1	665.8	108.9	5.1	1.000261
6500.0	804.7	16.6	48.9	963.3	664.6	110.6	5.4	1.000256
7000.0	790.4	15.6	49.6	949.7	663.4	112.2	5.7	1.000252
7500.0	776.4	14.6	50.2	936.3	662.2	111.3	6.4	1.000247
8000.0	762.7	13.6	50.8	923.1	660.9	110.5	7.2	1.000242
8500.0	749.0	12.4	52.1	910.2	659.6	116.9	7.0	1.000238
9000.0	735.5	11.2	55.8	897.7	658.2	125.0	6.8	1.000235
9500.0	722.2	9.8	63.2	885.5	656.7	139.3	6.3	1.000234
10000.0	709.1	8.5	69.0	873.5	655.2	154.9	6.3	1.000231
10500.0	696.2	7.3	69.1	861.5	653.6	159.7	6.8	1.000226
11000.0	683.3	6.2	69.3	849.1	652.3	163.4	7.2	1.000221
11500.0	670.8	5.1	69.5	836.9	651.0	164.0	6.8	1.000216
12000.0	658.4	4.0	69.8	824.9	649.6	164.6	6.4	1.000212
12500.0	646.3	2.9	70.3	813.1	648.3	165.0	6.5	1.000207
13000.0	634.1	1.6	73.9	801.6	646.7	165.3	6.7	1.000204
13500.0	622.2	.3	77.5	790.3	645.2	159.2	8.7	1.000201
14000.0	610.5	-1.0	81.1	779.2	643.6	154.8	11.3	1.000197
14500.0	599.0	-2.3	84.6	768.2	642.1	148.9	15.5	1.000194
15000.0	587.8	-2.8	82.5	755.4	641.4	145.7	19.2	1.000190
15500.0	576.5	-3.0	75.5	741.7	641.1	144.2	21.2	1.000184
16000.0	565.5	-4.2	74.5	730.7	639.7	143.2	23.0	1.000180
16500.0	554.7	-5.3	73.5	720.0	638.2	144.4	22.1	1.000176
17000.0	544.0	-6.5	72.5	709.3	636.8	145.6	21.3	1.000173
17500.0	533.6	-7.6	71.5	698.9	635.4	149.6	18.7	1.000169
18000.0	523.3	-8.4	62.5	687.6	634.4	155.3	16.0	1.000164
18500.0	513.1	-9.5	58.4	677.1	633.0	161.7	14.9	1.000160
19000.0	503.1	-10.8	58.8	667.3	631.4	168.4	14.3	1.000157
19500.0	493.3	-12.0	59.0	657.2	629.9	175.0	16.2	1.000154
20000.0	483.6	-12.8	35.2	646.5	628.8	179.9	19.0	1.000149
20500.0	474.0	-13.6	16.4	636.0	627.7	183.1	21.4	1.000144
21000.0	464.6	-14.7	14.8	626.0	626.4	185.7	23.8	1.000141
21500.0	455.4	-15.7	13.1	616.1	625.1	184.1	23.5	1.000139
22000.0	446.2	-16.8	13.0	606.3	623.8	182.1	23.0	1.000136
22500.0	437.3	-17.8	13.0	596.6	622.5	179.7	21.0	1.000134
23000.0	428.4	-18.9	14.4	586.9	621.3	176.7	18.8	1.000132
23500.0	419.7	-19.9	16.1	577.4	620.0	179.1	16.5	1.000130

STATION ALTITUDE 4126.59 FEET MSL
1 MAY 81 0815 HRS MDT
ASCENSION NO. 77

UPPER AIR DATA
1210010077
HOLLOMAN

GEODLTIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

TABLE 18 CONT

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	411.2	-21.0	-39.1	17.8	568.0	618.7	183.4	14.4	1.000128
24500.0	402.9	-22.0	-39.1	19.4	558.8	617.4	192.7	13.6	1.000126
25000.0	394.6	-23.2	-39.9	19.8	549.9	615.9	204.0	14.0	1.000124
25500.0	386.4	-24.5	-41.2	19.4	541.2	614.3	212.2	15.9	1.000122
26000.0	378.3	-25.8	-42.4	19.1	532.7	612.8	215.7	19.3	1.000120
26500.0	370.5	-27.1	-43.7	18.8	524.4	611.2	217.8	22.8	1.000118
27000.0	362.8	-28.3	-44.9	18.4	516.2	609.6	217.8	26.8	1.000116
27500.0	355.2	-29.6	-46.2	18.1	508.1	608.0	217.7	30.7	1.000114
28000.0	347.7	-30.7	-47.0	18.3	499.6	606.6	213.7	34.2	1.000112
28500.0	340.3	-31.8	-47.7	18.6	491.0	605.3	209.9	37.7	1.000110
29000.0	333.0	-32.8	-48.4	19.0	482.6	604.0	206.6	39.8	1.000108
29500.0	325.9	-33.8	-49.2	19.4	474.4	602.7	203.4	40.7	1.000106
30000.0	319.0	-34.9	-49.9	19.8	466.3	601.4	201.1	41.4	1.000104
30500.0	312.1	-35.9	-52.3	16.4**	458.3	600.1	201.3	40.7	1.000102
31000.0	305.3	-37.0	-59.7	7.3**	450.3	598.7	201.4	40.0	1.000100
32000.0	292.1	-39.6			442.7	597.3	203.2	39.6	1.000099
32500.0	285.7	-41.1			435.8	595.4	205.2	39.3	1.000097
33000.0	279.3	-42.3			429.0	593.4	206.7	40.0	1.000096
33500.0	273.1	-43.5			421.6	591.9	207.9	41.2	1.000094
34000.0	267.0	-44.6			414.2	590.4	208.8	43.0	1.000092
34500.0	261.0	-45.8			407.0	588.9	209.4	45.4	1.000091
35000.0	255.1	-47.0			399.9	587.4	209.4	47.2	1.000089
35500.0	249.4	-48.1			392.9	585.9	207.4	47.4	1.000088
36000.0	243.6	-49.3			386.1	584.4	205.4	47.6	1.000086
36500.0	238.0	-50.5			379.1	582.9	202.5	47.0	1.000084
37000.0	232.5	-51.6			372.4	581.4	199.4	46.4	1.000083
37500.0	227.2	-52.8			365.7	579.8	199.0	47.9	1.000081
38000.0	221.9	-53.4			359.2	578.3	200.7	50.9	1.000080
38500.0	216.7	-53.6			351.8	577.5	202.7	53.9	1.000078
39000.0	211.7	-53.9			343.9	577.2	206.6	56.1	1.000077
39500.0	206.7	-54.1			336.3	576.9	210.1	58.6	1.000075
40000.0	201.9	-54.8			328.9	576.5	212.6	57.0	1.000073
40500.0	197.2	-55.7			322.1	575.7	215.1	54.5	1.000072
41000.0	192.5	-56.6			315.8	574.5	216.0	53.0	1.000070
41500.0	187.9	-57.1			309.7	573.3	215.3	52.6	1.000069
42000.0	183.5	-57.5			303.0	572.7	214.7	51.9	1.000067
42500.0	179.1	-57.9			296.4	572.1	215.4	49.2	1.000066
43000.0	174.9	-58.0			290.0	571.5	216.3	46.4	1.000065
43500.0	170.7	-58.0			283.2	571.4	217.5	43.1	1.000063
44000.0					276.4	571.4	219.5	39.0	1.000062

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

UPPER AIR DATA
1210010077
HOLLOMAN

TABLE 18 CON'T

STATION ALTITUDE 4126.59 FEET MSL
1 MAY 81 0815 HRS M T
ASCENSION NO. 77

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
44000.0	160.6	-58.9		271.0	570.2	221.9	34.9	1.000060
44500.0	162.6	-59.8		265.6	569.0	222.6	34.9	1.000059
45000.0	158.7	-60.5		260.1	568.1	222.9	36.5	1.000058
45500.0	154.9	-61.2		254.7	567.1	223.2	38.1	1.000057
46000.0	151.2	-62.0		249.4	566.1	226.0	38.6	1.000056
46500.0	147.5	-62.3		243.7	565.7	228.8	39.2	1.000054
47000.0	143.9	-62.5		238.0	565.4	231.6	38.2	1.000053
47500.0	140.4	-62.7		232.4	565.2	235.0	34.1	1.000052
48000.0	137.0	-63.0		227.1	564.8	239.4	30.1	1.000051
48500.0	133.7	-63.9		222.5	563.5	239.6	26.0	1.000050
49000.0	130.4	-64.8		218.0	562.3	235.4	21.7	1.000049
49500.0	127.2	-65.8		213.6	561.0	229.1	17.7	1.000048
50000.0	124.1	-66.7		209.3	559.7	228.9	14.1	1.000047
50500.0	121.0	-66.5		203.9	560.1	231.8	10.7	1.000045
51000.0	118.0	-65.4		197.9	561.5	237.5	7.3	1.000044
51500.0	115.1	-64.5		192.2	562.8	257.7	5.1	1.000043
52000.0	112.3	-64.4		187.4	562.9	294.5	4.3	1.000042
52500.0	109.5	-64.2		182.7	563.1	317.9	4.6	1.000041
53000.0	106.9	-64.8		178.7	562.3	279.0	3.5	1.000040
53500.0	104.2	-65.6		175.0	561.2	237.9	4.4	1.000039
54000.0	101.7	-66.5		171.3	560.1	237.3	8.1	1.000038
54500.0	99.2	-66.6		167.2	559.9	237.7	12.0	1.000037
55000.0	96.7	-65.3		162.1	561.7	241.8	13.3	1.000036
55500.0	94.3	-65.1		157.9	562.0	247.7	13.5	1.000035
56000.0	92.0	-65.8		154.5	561.0	252.0	13.5	1.000034
56500.0	89.7	-66.5		151.2	560.1	252.8	12.5	1.000034
57000.0	87.5	-67.1		148.0	559.2	253.8	11.5	1.000033
57500.0	85.3	-67.8		144.8	558.2	257.2	11.5	1.000032
58000.0	83.2	-68.5		141.7	557.3	261.3	11.8	1.000032
58500.0	81.2	-67.9		137.7	558.2	266.0	12.2	1.000031
59000.0	79.1	-67.1		133.8	559.3	273.9	12.7	1.000030
59500.0	77.2	-66.3		130.0	560.3	281.2	13.4	1.000029
60000.0	75.3	-66.5		126.9	560.1	261.9	13.4	1.000028
60500.0	73.4	-66.8		123.9	559.7	280.8	13.1	1.000028
61000.0	71.6	-67.0		121.0	559.3	277.6	13.4	1.000027
61500.0	69.8	-67.3		118.2	558.9	272.2	14.8	1.000026
62000.0	68.1	-67.5		115.3	558.7	268.4	16.2	1.000026
62500.0	66.4	-67.7		112.6	558.4	274.4	16.7	1.000025
63000.0	64.7	-67.9		109.9	558.2	280.0	17.4	1.000024
63500.0	63.1	-68.0		107.2	557.9	294.1	16.8	1.000024

STATION ALTITUDE 4126.59 FEET MSL
1 MAY 81 0815 HRS MDT
ASCENSION NO. 77

UPPER AIR DATA
1210010077
HOLLOMAN
TABLE 18 CONT

GEODETIC COORDINATES
32.86865 LAT DEG
106.09965 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
64000.0	61.6	-67.5		104.3	558.6	313.5	17.1	1.000023
64500.0	60.1	-66.7		101.3	559.8	330.6	18.6	1.000023
65000.0	58.6	-65.8		98.4	561.0	346.9	18.3	1.000022
65500.0	57.1	-65.0		95.6	562.1	2.5	19.5	1.000021
66000.0	55.7	-64.1		92.9	563.3	9.0	16.2	1.000021
66500.0	54.4	-62.5		89.9	565.4	14.5	10.4	1.000020
67000.0	53.0	-61.2		87.2	567.2	27.7	5.2	1.000019
67500.0	51.8	-61.5		85.2	566.8	19.8	2.6	1.000019
68000.0	50.5	-61.8		83.3	566.4	283.3	.7	1.000019
68500.0	49.3	-61.7		81.2	566.6	289.9	1.7	1.000018
69000.0	48.1	-61.2		79.1	567.1	335.5	4.5	1.000018
69500.0	47.0	-60.8		77.0	567.7	344.6	7.9	1.000017
70000.0	45.8	-60.4		75.0	568.3			1.000017
70500.0	44.7	-59.9		73.1	568.9			1.000016
71000.0	43.7	-59.5		71.2	569.5			1.000016

STATION ALTITUDE 4126.59 FEET MSL
1 MAY 81 085 HRS MDT
ASCENSION NO. 77

MANDATORY LEVELS
1210010077
HOLLOMAN
TABLE 19

GEODETIC COORDINATES
32.88865 LAT DEG
106.09965 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4963.	19.7	8.1	47.	29.8	15.2
800.0	6666.	16.3	5.6	49.	111.1	5.5
750.0	8457.	12.5	2.9	52.	116.3	7.0
700.0	10343.	7.6	2.3	69.	158.3	6.6
650.0	12333.	3.2	-1.7	70.	164.9	6.5
600.0	14445.	-2.1	-4.4	84.	149.3	15.1
550.0	16704.	-5.8	-9.9	73.	144.9	21.8
500.0	19133.	-11.2	-17.6	59.	170.5	14.4
450.0	21761.	-16.3	-38.2	13.	182.9	23.2
400.0	24634.	-22.4	-39.1	20.	196.4	13.7
350.0	27800.	-30.4	-46.8	18.	215.1	33.1
300.0	31341.	-37.8			202.7	39.7
250.0	35370.	-48.0			205.6	47.6
200.0	40104.	-55.1			216.0	53.6
175.0	42877.	-58.0			217.3	43.4
150.0	46037.	-62.2			226.8	38.8
125.0	49708.	-66.4			228.2	15.3
100.0	54163.	-67.0			237.6	10.5
80.0	58590.	-67.4			270.1	12.4
70.0	61238.	-67.3			273.1	14.6
60.0	64283.	-66.6			330.0	18.6
50.0	67959.	-61.9			243.1	1.4

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

GEODOLITE COORDINATES
32.40043 LAT DEG
106.57033 LONG DEG

SIGNIFICANT LEVEL DATA
1210020309
WHITE SANDS
TABLE 20

STATION ALTITUDE: 3989.00 FEET MSL
1 MAY 81 0918 HRS MDT
ASCENSION NO. 309

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MFL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
880.0	3989.0	20.8	11.7	56.0
850.0	4970.1	17.8	8.6	55.0
820.0	5975.9	15.1	6.9	58.0
800.4	6650.0	15.3	5.5	52.0
761.8	8020.7	12.4	4.6	59.0
700.0	10332.7	6.9	3.0	76.0
687.2	10831.2	5.8	2.4	79.0
633.2	13022.0	2.3	-4.9	59.0
589.4	14911.6	-2.3	-7.8	67.0
522.4	18023.4	-9.1	-30.9	15.0
500.0	19131.8	-12.2	-32.8	16.0
490.0	19638.9	-13.2	-29.4	24.0
482.2	20040.8	-13.2	-34.3	15.0
400.0	24629.1	-23.6	-44.1	13.0
378.0	25979.3	-27.5	-44.9	17.0
371.0	26421.5	-28.0	-36.4	44.0
357.4	27301.0	-29.8	-36.8	50.0
337.2	28656.7	-33.2	-41.2	44.0
330.8	29099.6	-33.7	-40.9	48.0
303.2	31092.1	-39.3	-49.3	50.0
300.0	31332.1	-38.9		
250.0	35374.2	-47.7		
223.8	37754.6	-52.9		
213.4	38766.2	-52.8		
200.0	40138.1	-55.1		
189.2	41303.0	-56.4		
166.8	43934.9	-57.2		
150.0	46134.2	-60.0		
123.6	50053.5	-67.1		
120.2	50611.8	-64.8		
100.0	54305.4	-66.0		
94.4	55463.7	-64.4		
88.6	56738.0	-66.1		
70.0	61454.4	-66.2		
64.8	62994.7	-67.5		
53.0	67058.2	-60.9		
50.0	68249.7	-62.8		
43.6	71068.8	-58.2		
39.4	73177.2	-58.1		
37.2	74383.9	-54.4		

STATION ALTITUDE 3489.00 FEET MSL
1 MAY 81 0918 HRS MDT
ASCENSION NO. 309

SIGNIFICANT LEVEL DATA
1210020309
WHITE SANDS
TABLE 20 CON'T

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

PRESSURE	GEOMETRIC ALTITUDE	TEMPERATURE AIR	DEWPOINT DEGREES	REL. HUM. PERCENT
MILLIBARS	MSL FEET	DEGREES	CENTIGRADE	
30.0	78990.5	-49.7		
23.6	84262.8	-43.1		
21.2	86652.9	-43.4		
20.0	87955.3	-41.8		
16.4	92430.0	-39.5		
14.6	95064.2	-39.7		
13.4	97026.2	-35.1		
11.6	100343.7	-37.3		
10.0	103746.6	-36.7		

GEODYLIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

UPPER AIR DATA
1210020309
WHITE SANDS
TABLE 21

STATION ALTITUDE 3969.00 FEET MSL
1 MAY 81 0918 HRS MDT
ASCENSION NO. 009

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (IN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
3969.0	880.0	20.0	56.0	1036.7	669.9	180.0	2.9	1.000291
4000.0	879.7	20.8	56.0	1036.5	669.9	179.0	2.9	1.000291
4500.0	864.2	19.2	55.5	1024.1	668.0	135.4	3.3	1.000283
5000.0	849.1	17.7	55.1	1011.9	666.1	111.2	4.9	1.000276
5500.0	834.1	16.4	56.6	998.8	664.5	99.9	6.9	1.000270
6000.0	819.3	15.1	57.8	985.6	663.0	94.5	9.2	1.000265
6500.0	804.7	13.5	53.3	967.8	663.0	94.2	12.3	1.000258
7000.0	790.4	14.6	53.8	952.9	662.2	94.8	15.0	1.000253
7500.0	776.2	13.5	56.3	939.3	661.0	90.7	16.7	1.000250
8000.0	762.4	12.4	58.9	926.0	659.8	94.7	17.1	1.000246
8500.0	748.6	11.3	62.5	913.0	658.4	104.1	16.2	1.000243
9000.0	735.0	10.1	66.2	900.2	657.0	108.4	14.7	1.000239
9500.0	721.7	8.9	69.9	887.7	655.6	113.4	12.8	1.000236
10000.0	708.6	7.7	73.6	875.3	654.2	116.7	11.7	1.000232
10500.0	695.7	6.5	77.0	863.0	652.8	118.8	11.1	1.000229
11000.0	682.9	5.5	77.5	850.3	651.6	121.7	10.3	1.000224
11500.0	670.2	4.7	72.9	837.3	650.6	125.2	9.5	1.000217
12000.0	657.8	3.9	68.3	824.4	649.5	124.6	10.3	1.000211
12500.0	645.7	3.1	63.8	811.8	648.5	123.6	11.3	1.000205
13000.0	633.7	2.3	59.2	799.3	647.4	124.3	15.2	1.000199
13500.0	621.8	1.1	61.0	787.8	646.0	125.8	18.8	1.000196
14000.0	610.1	-1.1	63.1	776.5	644.5	129.8	21.6	1.000192
14500.0	598.7	-1.3	65.3	765.4	643.1	133.4	23.4	1.000189
15000.0	587.4	-2.5	65.5	754.4	641.6	137.7	22.9	1.000185
15500.0	576.1	-3.6	57.2	743.2	640.2	142.6	21.5	1.000180
16000.0	565.0	-4.7	48.8	732.2	638.8	149.4	19.0	1.000174
16500.0	554.2	-5.8	40.5	721.3	637.4	157.8	17.0	1.000169
17000.0	543.5	-6.9	32.1	710.5	636.0	167.7	15.6	1.000165
17500.0	533.1	-8.0	23.7	699.9	634.6	176.3	15.1	1.000160
18000.0	522.9	-9.0	15.4	689.5	633.2	182.6	15.3	1.000156
18500.0	512.6	-10.4	15.4	679.6	631.5	183.2	16.8	1.000154
19000.0	502.6	-11.8	15.9	669.8	629.9	180.4	19.2	1.000151
19500.0	492.7	-12.9	21.8	659.4	628.6	175.3	22.0	1.000150
20000.0	483.0	-13.2	15.9	647.1	628.2	170.4	25.0	1.000146
20500.0	473.3	-14.2	14.8	636.6	626.9	170.3	24.7	1.000143
21000.0	463.7	-15.4	14.6	626.6	625.6	171.0	24.1	1.000141
21500.0	454.4	-16.5	14.4	616.6	624.2	174.1	23.4	1.000139
22000.0	445.2	-17.6	14.1	606.9	622.8	178.9	22.7	1.000136
22500.0	436.2	-18.8	13.9	597.3	621.4	179.6	22.1	1.000134
23000.0	427.4	-19.9	13.7	587.9	620.0	179.1	21.3	1.000132

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WHITE SANDS
TABLE 21 CONT

GEODETTIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

GEODETTIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
23500.0	410.8	-21.0	-41.7	13.5	578.7	618.6	178.4	20.4	1.000130
24000.0	410.4	-22.2	-42.8	13.3	569.0	617.2	177.8	20.9	1.000128
24500.0	402.1	-23.3	-43.9	13.1	560.6	615.8	177.2	22.1	1.000126
25000.0	393.8	-24.7	-44.3	14.1	552.1	614.1	179.6	23.7	1.000124
25500.0	385.7	-26.1	-44.6	15.6	543.0	612.3	183.0	25.6	1.000122
26000.0	377.7	-27.5	-44.3	18.3	535.6	610.0	180.3	26.9	1.000120
26500.0	369.8	-28.2	-36.5	44.5	525.6	609.9	189.5	28.1	1.000119
27000.0	362.0	-29.2	-36.7	47.9	516.8	608.0	194.2	29.2	1.000117
27500.0	354.4	-30.3	-37.5	49.1	508.2	607.2	193.4	30.4	1.000115
28000.0	346.8	-31.6	-39.1	46.9	500.0	605.6	201.4	32.5	1.000113
28500.0	339.5	-32.8	-40.7	44.7	492.0	604.0	202.2	34.7	1.000111
29000.0	332.2	-33.6	-40.9	47.1	483.0	603.0	193.7	36.3	1.000109
29500.0	325.1	-34.6	-42.5	44.4	474.7	601.7	196.3	37.6	1.000107
30000.0	313.0	-35.8	-44.5	39.9	466.7	600.0	193.0	39.8	1.000105
30500.0	311.2	-36.9	-46.6	35.3	458.6	598.8	194.5	42.2	1.000103
31000.0	304.4	-38.1	-48.9	30.8	451.1	597.3	195.4	44.3	1.000101
31500.0	297.7	-39.3	-48.9		443.5	595.8	196.7	46.2	1.000099
32000.0	291.1	-40.4			435.0	594.4	193.5	47.4	1.000097
32500.0	284.6	-41.4			427.9	593.0	200.5	48.4	1.000095
33000.0	278.3	-42.5			420.3	591.6	203.2	50.8	1.000094
33500.0	272.1	-43.6			412.9	590.2	205.6	53.7	1.000092
34000.0	266.0	-44.7			405.0	588.8	205.5	55.6	1.000090
34500.0	260.1	-45.8			398.5	587.4	204.3	57.3	1.000089
35000.0	254.3	-46.9			391.5	586.0	201.7	56.0	1.000087
35500.0	248.5	-48.0			384.5	584.0	198.5	53.9	1.000086
36000.0	242.8	-49.1			377.5	583.2	196.7	53.3	1.000084
36500.0	237.2	-50.2			370.0	581.8	200.3	53.3	1.000083
37000.0	231.8	-51.3			363.9	580.3	200.3	55.1	1.000081
37500.0	226.5	-52.3			357.3	578.9	199.5	57.6	1.000080
38000.0	221.2	-52.9			349.9	578.2	200.0	59.1	1.000078
38500.0	216.1	-53.2			341.7	578.3	201.5	59.5	1.000076
39000.0	211.1	-53.0			334.3	577.6	203.8	59.3	1.000074
39500.0	206.1	-54.0			327.7	576.7	207.6	57.7	1.000073
40000.0	201.3	-54.9			321.3	575.6	211.9	56.3	1.000072
40500.0	196.6	-55.5			314.6	574.7	210.7	54.0	1.000070
41000.0	192.0	-56.1			308.0	574.0	209.3	51.7	1.000069
41500.0	187.4	-56.5			301.3	573.5	207.7	50.6	1.000067
42000.0	183.0	-56.6			294.4	573.3	206.0	48.9	1.000066
42500.0	178.7	-56.8			287.6	573.1	205.2	48.4	1.000064
43000.0	174.4	-56.9			281.0	572.9	203.7	46.3	1.000063

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32.40043 LAT (EG
106.37033 LONG LEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) SPEED KNOTS	INDEX OF REFRACTION
43500.0	170.3	-57.1		274.6	572.7	211.3	1.000061
44000.0	160.3	-57.3		268.3	572.4	213.3	1.000060
44500.0	162.3	-57.9		262.7	571.5	215.2	1.000059
45000.0	150.4	-58.6		257.2	570.7	216.1	1.000057
45500.0	154.7	-59.2		251.8	569.8	216.7	1.000056
46000.0	151.0	-59.8		246.5	569.0	218.6	1.000055
46500.0	147.3	-60.7		241.5	567.9	222.4	1.000054
47000.0	143.7	-61.6		236.6	566.7	227.2	1.000053
47500.0	140.2	-62.5		231.9	565.5	233.2	1.000052
48000.0	136.8	-63.4		227.2	564.2	242.7	1.000051
48500.0	133.5	-64.3		222.6	563.0	252.0	1.000050
49000.0	130.2	-65.2		218.1	561.8	257.6	1.000049
49500.0	127.0	-66.1		213.7	560.6	265.5	1.000048
50000.0	123.9	-67.0		209.4	559.4	251.0	1.000047
50500.0	120.9	-65.3		202.5	561.7	233.2	1.000045
51000.0	117.9	-64.9		197.2	562.2	225.7	1.000044
51500.0	115.0	-65.1		192.5	561.9	221.5	1.000043
52000.0	112.2	-65.3		188.0	561.7	215.6	1.000042
52500.0	109.4	-65.4		183.5	561.5	203.7	1.000041
53000.0	106.7	-65.6		179.1	561.3	193.0	1.000040
53500.0	104.1	-65.7		174.8	561.1	198.5	1.000039
54000.0	101.5	-65.9		170.7	560.8	207.5	1.000038
54500.0	99.0	-65.7		166.3	561.1	213.1	1.000037
55000.0	96.6	-65.0		161.7	562.0	236.9	1.000036
55500.0	94.2	-64.4		157.3	562.8	250.4	1.000035
56000.0	91.9	-65.1		153.9	561.9	272.6	1.000034
56500.0	89.7	-65.8		150.6	561.0	278.0	1.000034
57000.0	87.4	-66.1		147.1	560.6	283.8	1.000033
57500.0	85.3	-66.1		143.5	560.6	278.9	1.000032
58000.0	83.2	-66.1		140.0	560.5	273.6	1.000031
58500.0	81.1	-66.1		136.5	560.5	268.1	1.000030
59000.0	79.1	-66.1		133.2	560.5	263.2	1.000030
59500.0	77.2	-66.2		129.9	560.5	259.2	1.000029
60000.0	75.3	-66.2		126.7	560.5	259.0	1.000028
60500.0	73.4	-66.2		123.6	560.5	260.6	1.000028
61000.0	71.6	-66.2		120.5	560.5	262.1	1.000027
61500.0	69.8	-66.2		117.6	560.4	275.7	1.000026
62000.0	68.1	-66.7		114.9	559.8	292.2	1.000026
62500.0	66.4	-67.1		112.3	559.2	303.6	1.000025
63000.0	64.8	-67.5		109.7	558.7	306.6	1.000024

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STATION ALTITUDE 3989.00 FEET MSL
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GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DEWPOINT DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
33500.0	63.2	-66.7			106.6	559.8	310.0	13.1	1.000024
34000.0	61.7	-65.9			103.6	560.9	309.8	10.8	1.000023
34500.0	60.1	-65.1			100.7	562.0	307.6	7.9	1.000022
35000.0	58.7	-64.2			97.9	563.1	302.6	5.0	1.000022
35500.0	57.2	-63.4			95.1	564.2	317.2	3.3	1.000021
36000.0	55.8	-62.6			92.4	565.3	353.3	2.6	1.000021
36500.0	54.5	-61.8			89.6	566.4	31.0	3.2	1.000020
37000.0	53.2	-61.0			87.3	567.4	28.3	4.0	1.000019
37500.0	51.9	-61.6			85.4	568.6	22.0	4.8	1.000019
38000.0	50.6	-62.4			83.7	565.6	17.0	5.7	1.000019
38500.0	49.4	-62.4			81.6	565.6	19.9	6.1	1.000018
39000.0	48.2	-61.6			79.4	566.7	23.1	6.6	1.000018
39500.0	47.1	-60.8			77.2	567.8	25.8	7.0	1.000017
40000.0	45.9	-59.9			75.0	568.8	25.8	6.7	1.000017
40500.0	44.8	-59.1			73.0	569.9	25.8	6.4	1.000016
41000.0	43.7	-58.3			70.9	571.0	26.0	6.1	1.000016
41500.0	42.7	-58.2			69.2	571.2	30.3	6.2	1.000015
42000.0	41.7	-58.2			67.6	571.2	33.9	6.3	1.000015
42500.0	40.7	-58.1			65.9	571.3	37.6	6.3	1.000015
43000.0	39.7	-58.1			64.4	571.3	41.4	6.4	1.000014
43500.0	38.8	-57.1			62.6	572.6	45.1	6.4	1.000014
44000.0	37.9	-55.6			60.7	574.6	47.1	6.4	1.000014
44500.0	37.0	-54.3			58.9	576.4	47.3	6.2	1.000013
45000.0	36.1	-53.8			57.4	577.0	47.5	6.1	1.000013
45500.0	35.3	-53.3			55.9	577.7	40.5	5.6	1.000012
46000.0	34.5	-52.8			54.5	578.4	26.2	5.1	1.000012
46500.0	33.7	-52.2			53.1	579.0	9.9	4.9	1.000012
47000.0	32.9	-51.7			51.8	579.7	9.8	4.7	1.000012
47500.0	32.2	-51.2			50.5	580.4	18.5	4.5	1.000011
48000.0	31.4	-50.7			49.2	581.0	27.9	4.3	1.000011
48500.0	30.7	-50.2			48.0	581.7	40.7	4.6	1.000011
49000.0	30.0	-49.7			46.7	582.4	63.7	5.6	1.000010
49500.0	29.3	-49.1			45.6	583.2	75.3	6.8	1.000010
50000.0	28.7	-48.4			44.4	584.0	81.6	8.0	1.000010
50500.0	28.0	-47.8			43.3	584.8	85.9	9.2	1.000010
51000.0	27.4	-47.2			42.2	585.6	89.2	10.4	1.000009
51500.0	26.8	-46.6			41.1	586.4	93.2	11.2	1.000009
52000.0	26.2	-45.9			40.1	587.2	103.4	12.1	1.000009
52500.0	25.6	-45.3			39.1	588.0	109.6	13.1	1.000009
53000.0	25.0	-44.7			38.1	588.9	115.4	13.1	1.000008

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GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TH) DEGREES	SPEED KNOTS	INDEX OF REFRACTION
83500.0	24.4	-44.1			37.2	589.7	121.0	12.7	1.000008
84000.0	23.9	-43.4			36.2	590.5	128.1	12.5	1.000008
84500.0	23.4	-43.1			35.4	590.9	129.0	12.0	1.000008
85000.0	22.8	-43.2			34.6	590.8	128.9	11.2	1.000008
85500.0	22.3	-43.3			33.8	590.7	127.8	10.4	1.000008
86000.0	21.8	-43.3			33.1	590.6	129.2	9.0	1.000007
86500.0	21.3	-43.4			32.4	590.5	133.9	7.1	1.000007
87000.0	20.9	-43.0			31.6	591.1	141.9	5.3	1.000007
87500.0	20.4	-42.4			30.8	591.8	139.1	3.8	1.000007
88000.0	20.0	-41.8			30.1	592.6	108.9	3.1	1.000007
88500.0	19.5	-41.5			29.4	592.9	75.9	3.5	1.000007
89000.0	19.1	-41.3			28.7	593.2	66.7	5.4	1.000006
89500.0	18.7	-41.0			28.0	593.6	74.7	9.1	1.000006
90000.0	18.3	-40.7			27.4	593.9	78.1	12.8	1.000006
90500.0	17.9	-40.5			26.8	594.2	80.9	16.1	1.000006
91000.0	17.5	-40.2			26.1	594.6	86.3	17.6	1.000006
91500.0	17.1	-40.0			25.5	594.9	90.9	19.2	1.000006
92000.0	16.7	-39.7			24.9	595.2	94.4	20.8	1.000006
92500.0	16.3	-39.5			24.4	595.5	94.2	21.4	1.000005
93000.0	16.0	-39.5			23.8	595.4	94.0	21.9	1.000005
93500.0	15.6	-39.6			23.3	595.4	93.9	22.5	1.000005
94000.0	15.3	-39.6			22.8	595.3	93.7	22.7	1.000005
94500.0	15.0	-39.7			22.3	595.3	93.5	22.7	1.000005
95000.0	14.6	-39.7			21.8	595.2	93.4	22.7	1.000005
95500.0	14.3	-39.7			21.3	596.5	93.2	22.7	1.000005
96000.0	14.0	-37.5			20.7	593.0	93.0	23.2	1.000005
96500.0	13.7	-36.3			20.2	599.5	92.7	23.7	1.000004
97000.0	13.4	-35.2			19.6	601.0	92.4	24.3	1.000004
97500.0	13.1	-35.4			19.2	600.7	92.5	24.9	1.000004
98000.0	12.8	-35.7			18.8	600.3	93.1	25.7	1.000004
98500.0	12.6	-36.1			18.5	599.8	93.7	26.5	1.000004
99000.0	12.3	-36.4			18.1	599.4	94.3	27.3	1.000004
99500.0	12.0	-36.7			17.7	599.0	92.2	27.0	1.000004
100000.0	11.8	-37.1			17.4	598.6	88.6	26.3	1.000004
100500.0	11.5	-37.3			17.0	598.3	84.8	25.7	1.000004
101000.0	11.3	-37.2			16.6	598.4	80.8	25.2	1.000004
101500.0	11.0	-37.1			16.3	596.5			1.000004
102000.0	10.8	-37.0			15.9	598.7			1.000004
102500.0	10.6	-36.9			15.6	598.8			1.000003
103000.0	10.3	-36.8			15.2	598.9			1.000003

STATION ALTITUDE 3989.00 FEET MSL
 1 MAY 51 0918 HRS MDT
 ASCENSION NO. 309

UPPER AIR DATA
 1210020309
 WHITE SAILS
 TABLE 21 CONT

GEODETIC COORDINATES
 32.40043 LAT LEG
 106.37033 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES JELWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TND)	SPEED KNOTS	INDEX OF REFRACTION
103500.0	10.1	-36.7					14.9 599.0	1.000003

STATION ALTITUDE 3989.00 FEET MSL
1 MAY 81 0918 HRS MDT
ASCENSION NO. 309

MANDATORY LEVELS
12100-0309
WHITE SANDS
TABLE 22 CUN'T

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4066.	17.9	8.6	55.	112.2	4.8
800.0	6659.	15.3	5.5	52.	94.2	13.3
750.0	8443.	11.4	4.4	62.	103.6	10.3
700.0	10322.	6.9	3.0	76.	118.1	11.3
650.0	12311.	3.4	-2.4	65.	123.9	10.9
600.0	14178.	-1.2	-6.9	65.	132.9	23.4
550.0	16684.	-6.2	-18.4	37.	161.5	16.4
500.0	19105.	-12.2	-32.8	16.	179.9	19.8
450.0	21726.	-17.0	-37.9	14.	175.8	23.0
400.0	24588.	-23.6	-44.1	13.	177.1	22.3
350.0	27740.	-31.0	-38.4	48.	201.0	31.5
300.0	31270.	-38.9			196.2	45.5
250.0	35297.	-47.7			199.4	54.5
200.0	40041.	-55.1			211.0	55.8
175.0	42424.	-56.9			208.3	48.7
150.0	45010.	-60.0			219.3	41.4
125.0	49686.	-66.7			257.1	7.7
100.0	54137.	-66.0			211.6	13.6
80.0	58587.	-66.1			265.5	13.1
70.0	61243.	-66.2			273.4	15.8
60.0	64304.	-65.0			307.0	7.9
50.0	67993.	-62.8			17.9	5.9
40.0	72573.	-58.1			40.0	6.3
30.0	78653.	-49.7			62.3	5.4
25.0	82612.	-44.7			114.7	13.1
20.0	87542.	-41.8			115.1	3.2
15.0	93979.	-39.7			93.0	22.7
10.0	103181.	-36.7				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
1 MAY 81 0925 HRS MDT
ASCENSION NO. 29

SIGNIFICANT LEVEL DATA
1210030029
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LONG DEG

TABLE 23

PRESSURE	GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
876.4	4051.0	22.9	9.3	42.0
850.0	4923.7	21.0	9.6	48.0
769.4	7717.6	12.8	6.6	66.0
740.4	8777.8	11.9	4.4	60.0
700.0	10311.5	7.6	1.9	67.0
636.6	12863.1	2.4	1.5	94.0
600.6	14399.9	-2.1	-4.0	87.0
557.0	16361.7	-4.9	-7.5	82.0
523.0	17983.5	-7.6	-15.5	53.0
511.2	18566.3	-9.0	-20.4	39.0
500.0	19129.1	-10.1	-26.3	25.0
458.0	21335.1	-14.4	-32.3	20.0
427.2	23061.4	-17.3	-31.4	28.0
400.0	24669.0	-22.0	-35.5	28.0
374.8	26233.8	-25.4	-37.5	31.0
360.6	27153.9	-26.7	-40.0	27.0
300.0	31429.4	-37.6	-50.6	24.0
250.0	35492.5	-46.6		
219.6	38287.6	-52.8		
209.0	39340.6	-52.4		
200.0	40273.0	-54.9		
193.6	40956.4	-56.0		
165.0	44284.8	-58.9		
150.0	46244.6	-61.5		
133.6	47856.1	-62.6		
122.6	50324.7	-67.0		
118.0	51093.9	-62.9		
100.0	54438.2	-65.2		
81.6	58515.7	-66.2		
70.0	61581.9	-66.5		
62.0	64004.6	-67.0		
50.0	68349.2	-61.8		
37.2	74447.9	-58.4		
30.0	79002.1	-50.7		
20.0	87861.0	-44.7		
16.4	92316.1	-38.6		
13.7	96420.7	-37.3		

STATION ALTITUDE 4051.00 FEET MSL
1 MAY 81 0925 HRS MDT
ASCENSION NO. 29

UPPER AIR DATA
1210030029
JALLEN

GEODETIC COORDINATES
33.16712 LAT 1EG
106.49511 LON DEG

TABLE 24

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
4051.0	876.4	22.9	9.3	1026.0	672.0	10.0	3.1	1.000279
4500.0	862.7	21.9	9.5	1013.2	671.0	27.6	4.7	1.000278
5000.0	847.7	20.8	9.5	999.4	669.7	36.5	6.8	1.000275
5500.0	832.7	19.3	9.1	986.7	668.0	41.2	8.9	1.000271
6000.0	818.0	17.8	8.7	974.2	666.3	48.7	8.6	1.000267
6500.0	803.5	16.4	8.1	961.9	664.6	58.1	9.0	1.000263
7000.0	789.3	14.9	7.6	949.8	662.9	66.3	10.4	1.000259
7500.0	775.4	13.4	6.9	938.0	661.1	78.7	12.7	1.000255
8000.0	761.6	12.6	6.0	924.2	660.0	86.5	14.2	1.000250
8500.0	747.9	12.1	5.0	909.2	659.5	92.7	14.6	1.000243
9000.0	734.4	11.3	4.0	895.7	658.4	98.1	13.4	1.000238
9500.0	721.1	9.9	3.2	884.0	656.7	99.4	11.7	1.000233
10000.0	708.0	8.5	2.4	872.4	655.0	99.5	9.9	1.000229
10500.0	695.1	7.2	1.9	860.4	653.6	99.7	8.1	1.000226
11000.0	682.3	6.2	2.0	847.5	652.4	103.1	7.3	1.000223
11500.0	669.7	5.2	1.9	834.9	651.2	107.4	6.6	1.000220
12000.0	657.4	4.2	1.8	822.5	650.1	120.7	6.5	1.000218
12500.0	645.3	3.1	1.7	810.3	648.9	135.1	7.0	1.000215
13000.0	633.3	2.0	1.0	798.7	647.5	142.9	8.1	1.000211
13500.0	621.4	.5	-.7	788.2	645.6	143.3	9.7	1.000205
14000.0	609.8	-.9	-2.5	777.9	643.8	143.7	11.4	1.000199
14500.0	598.3	-2.2	-4.1	767.2	642.1	145.3	14.3	1.000194
15000.0	586.9	-3.0	-5.0	754.7	641.2	147.3	17.0	1.000190
15500.0	575.7	-3.7	-5.9	742.4	640.4	159.7	19.3	1.000186
16000.0	564.8	-4.4	-6.8	730.3	639.5	168.1	21.7	1.000182
16500.0	554.0	-5.1	-8.1	718.5	638.5	169.6	22.3	1.000178
17000.0	543.4	-6.0	-10.4	707.1	637.4	169.7	22.1	1.000172
17500.0	532.9	-6.8	-12.9	695.9	636.3	168.0	21.0	1.000167
18000.0	522.7	-7.6	-15.6	684.9	635.2	171.5	20.9	1.000162
18500.0	512.5	-8.8	-19.8	674.9	633.7	176.8	21.4	1.000157
19000.0	502.5	-9.8	-24.8	664.5	632.3	180.2	23.9	1.000152
19500.0	492.7	-10.8	-27.3	653.9	631.1	182.3	26.2	1.000149
20000.0	483.0	-11.8	-28.7	643.5	629.9	182.0	27.6	1.000146
20500.0	473.5	-12.8	-30.0	633.2	628.8	181.1	28.2	1.000144
21000.0	464.1	-13.7	-31.4	623.1	627.6	179.0	27.2	1.000141
21500.0	455.0	-14.7	-32.2	613.0	626.4	176.7	25.8	1.000139
22000.0	445.9	-15.5	-31.8	602.7	625.4	174.1	23.6	1.000137
22500.0	437.0	-16.4	-31.6	592.6	624.4	172.0	21.5	1.000134
23000.0	428.3	-17.2	-31.4	582.7	623.4	171.5	19.5	1.000132
23500.0	419.6	-18.6	-32.5	574.0	621.7	172.2	18.0	1.000130

STATION ALTITUDE 4051.00 FEET MSL
1 MAY 81 0925 HRS MDT
ASCENSION NO. 29

UPPER AIR DATA
1210030029
JALLEN

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

TABLE 24 CONT

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	411.1	-20.0	28.0	565.6	619.9	179.3	18.6	1.000128
24500.0	402.8	-21.5	28.0	557.4	618.1	185.7	19.6	1.000126
25000.0	394.5	-22.7	28.6	548.7	616.6	192.9	22.8	1.000124
25500.0	386.4	-23.8	29.6	539.7	615.2	196.1	26.4	1.000122
26000.0	378.5	-24.9	30.6	530.9	613.9	199.4	30.3	1.000120
26500.0	370.6	-25.8	29.8	521.8	612.8	199.9	34.2	1.000118
27000.0	362.9	-26.5	27.7	512.5	611.9	199.3	37.2	1.000115
27500.0	355.3	-27.6	26.8	503.9	610.5	198.5	39.8	1.000113
28000.0	347.7	-28.9	26.4	495.8	609.0	198.1	41.2	1.000111
28500.0	340.3	-30.1	26.1	487.8	607.4	197.9	41.8	1.000109
29000.0	333.1	-31.4	25.7	479.9	605.8	197.3	41.2	1.000108
29500.0	326.0	-32.7	25.4	472.2	604.2	196.2	39.5	1.000106
30000.0	319.0	-34.0	25.0	464.6	602.5	195.2	37.4	1.000104
30500.0	312.2	-35.2	24.7	457.1	600.9	194.3	34.7	1.000102
31000.0	305.6	-36.5	24.3	449.8	599.3	196.2	33.6	1.000101
31500.0	299.1	-37.8	23.6**	442.5	597.7	204.8	37.3	1.000099
32000.0	292.4	-38.9	20.6**	434.8	596.3	211.8	41.6	1.000097
32500.0	285.9	-40.0	17.7**	427.2	594.9	209.0	43.5	1.000095
33000.0	279.6	-41.1	14.7**	419.7	593.5	206.1	45.3	1.000094
33500.0	273.4	-42.2	11.8**	412.3	592.1	202.2	45.2	1.000092
34000.0	267.3	-43.3	8.8**	405.1	590.6	197.6	44.3	1.000090
34500.0	261.4	-44.4	5.9**	398.1	589.2	197.1	44.6	1.000089
35000.0	255.6	-45.5	2.9**	391.1	587.8	200.4	45.8	1.000087
35500.0	249.9	-46.6		384.3	586.4	201.5	46.9	1.000086
36000.0	244.2	-47.7		377.4	584.9	199.0	47.5	1.000084
36500.0	238.6	-48.8		370.5	583.5	196.9	48.3	1.000083
37000.0	233.1	-49.9		363.8	582.0	197.3	49.6	1.000081
37500.0	227.8	-51.1		357.3	580.6	197.7	50.9	1.000080
38000.0	222.5	-52.2		350.8	579.1	201.1	54.4	1.000078
38500.0	217.4	-52.7		343.6	578.4	204.2	58.2	1.000077
39000.0	212.4	-52.5		335.3	578.7	206.8	60.6	1.000075
39500.0	207.4	-52.8		328.0	578.3	209.2	62.4	1.000073
40000.0	202.6	-54.2		322.3	576.5	211.3	63.6	1.000072
40500.0	197.9	-55.3		316.3	575.1	212.3	58.1	1.000070
41000.0	193.2	-56.0		310.0	574.0	213.5	52.7	1.000069
41500.0	188.6	-56.5		303.2	573.5	214.6	48.2	1.000068
42000.0	184.1	-56.9		296.6	572.9	215.8	44.4	1.000066
42500.0	179.8	-57.3		290.2	572.3	216.6	41.3	1.000065
43000.0	175.5	-57.8		283.9	571.7	215.6	41.1	1.000063
43500.0	171.3	-58.2		277.7	571.1	214.6	40.9	1.000062

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

UPPER AIR DATA
1210030029
JALLEN
TABLE 24 CONT

STATION ALTITUDE 4051.00 FEET MSL
1 MAY 81 0925 HRS MDT
ASCENSION NO. 29

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
44000.0	167.3	-58.7		271.7	570.6	213.7	39.8	1.000060
44500.0	163.3	-59.2		265.8	569.9	212.8	38.5	1.000059
45000.0	159.4	-59.8		260.3	569.0	212.7	37.9	1.000058
45500.0	155.5	-60.5		254.8	568.1	214.7	39.3	1.000057
46000.0	151.8	-61.2		249.5	567.2	216.7	40.7	1.000056
46500.0	148.1	-61.7		244.0	566.5	218.2	40.2	1.000054
47000.0	144.5	-62.0		238.5	566.1	219.7	39.0	1.000053
47500.0	141.0	-62.4		233.1	565.6	220.8	37.2	1.000052
48000.0	137.6	-62.9		228.0	564.9	220.0	31.8	1.000051
48500.0	134.2	-63.7		223.3	563.8	218.9	26.5	1.000050
49000.0	130.9	-64.6		218.8	562.5	218.1	22.1	1.000049
49500.0	127.7	-65.5		214.3	561.3	217.6	18.4	1.000048
50000.0	124.6	-66.4		210.0	560.1	216.9	14.6	1.000047
50500.0	121.5	-66.1		204.5	560.6	218.6	11.0	1.000046
51000.0	118.6	-63.4		196.9	564.2	222.0	7.4	1.000044
51500.0	115.7	-63.2		191.9	564.5	218.2	4.9	1.000043
52000.0	112.8	-63.5		187.5	564.1	196.4	4.1	1.000042
52500.0	110.1	-63.9		183.2	563.6	170.0	4.1	1.000041
53000.0	107.4	-64.2		179.0	563.1	180.7	5.0	1.000040
53500.0	104.8	-64.6		174.9	562.7	190.4	6.2	1.000039
54000.0	102.2	-64.9		170.9	562.2	194.8	6.7	1.000038
54500.0	99.7	-65.2		167.0	561.8	194.7	5.9	1.000037
55000.0	97.2	-65.3		163.0	561.6	194.6	5.1	1.000036
55500.0	94.8	-65.5		159.1	561.4	230.6	6.7	1.000035
56000.0	92.5	-65.6		155.3	561.3	249.8	10.4	1.000035
56500.0	90.2	-65.7		151.5	561.1	257.4	14.2	1.000034
57000.0	88.0	-65.8		147.9	560.9	260.4	17.1	1.000033
57500.0	85.8	-66.0		144.3	560.8	262.6	20.1	1.000032
58000.0	83.7	-66.1		140.9	560.6	267.0	18.5	1.000031
58500.0	81.7	-66.2		137.5	560.4	274.1	15.7	1.000031
59000.0	79.6	-66.2		134.1	560.4	283.1	13.6	1.000030
59500.0	77.7	-66.3		130.8	560.3	286.9	14.7	1.000029
60000.0	75.8	-66.3		127.6	560.2	290.2	15.9	1.000028
60500.0	73.9	-66.4		124.5	560.2	290.4	15.8	1.000028
61000.0	72.1	-66.4		121.5	560.1	287.8	17.5	1.000027
61500.0	70.3	-66.5		118.5	560.0	285.4	18.3	1.000026
62000.0	68.5	-66.6		115.6	559.9	285.2	18.4	1.000026
62500.0	66.9	-66.7		112.8	559.8	285.4	18.4	1.000025
63000.0	65.2	-66.8		110.1	559.6	286.5	18.4	1.000025
63500.0	63.6	-66.9		107.4	559.5	290.7	18.3	1.000024

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

SHIP AIR DATA
1210030029
JALLEN

TABLE 24 CONT

STATION ALTITUDE 4051.00 FEET MSL
1 MAY 81 0925 HRS MDT
ASCENSION NO. 29

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (TN) DEGREES	SPEED KNOTS	INDEX OF REFRACTION
6400.0	62.0	-67.0		104.8	559.4	294.8	18.4	1.000023
6450.0	60.5	-66.4		101.9	560.2	302.1	17.2	1.000023
6500.0	59.0	-65.8		99.2	561.0	312.6	15.8	1.000022
6550.0	57.6	-65.2		96.5	561.8	324.7	14.9	1.000021
6600.0	56.2	-64.6		93.8	562.6	338.9	11.0	1.000021
6650.0	54.8	-64.0		91.3	563.4	4.8	8.4	1.000020
6700.0	53.5	-63.4		88.8	564.2	33.3	7.9	1.000020
6750.0	52.1	-62.8		86.4	565.0	49.3	7.9	1.000019
6800.0	50.9	-62.2		84.0	565.8	64.1	8.5	1.000019
6850.0	49.6	-61.7		81.8	566.5	69.2	8.6	1.000018
6900.0	48.4	-61.4		79.7	566.9	68.6	8.2	1.000018
6950.0	47.3	-61.2		77.7	567.2	67.9	7.8	1.000017
7000.0	46.2	-60.9		75.7	567.6	65.7	7.3	1.000017
7050.0	45.0	-60.6		73.8	568.0	62.5	6.7	1.000016
7100.0	44.0	-60.3		72.0	568.3	58.8	6.1	1.000016
7150.0	42.9	-60.0		70.2	568.7	58.0	5.6	1.000016
7200.0	41.9	-59.8		68.4	569.1	57.1	5.2	1.000015
7250.0	40.9	-59.5		66.7	569.5	54.8	4.7	1.000015
7300.0	39.9	-59.2		65.0	569.8	43.2	4.3	1.000014
7350.0	38.9	-58.9		63.3	570.2	30.0	4.1	1.000014
7400.0	38.0	-58.6		61.7	570.6	18.0	4.5	1.000014
7450.0	37.1	-58.3		60.2	571.0	11.9	5.6	1.000013
7500.0	36.2	-57.5		58.5	572.1	8.0	6.8	1.000013
7550.0	35.4	-56.6		56.9	573.3	8.9	7.5	1.000013
7600.0	34.6	-55.8		55.4	574.4	16.1	7.5	1.000012
7650.0	33.8	-54.9		53.9	575.5	23.3	7.7	1.000012
7700.0	33.0	-54.1		52.4	576.6	29.3	7.7	1.000012
7750.0	32.2	-53.2		51.0	577.7	34.4	7.5	1.000011
7800.0	31.5	-52.4		49.6	578.8	39.7	7.3	1.000011
7850.0	30.7	-51.5		48.3	579.9	44.5	7.4	1.000011
7900.0	30.0	-50.7		47.0	581.0	48.5	7.7	1.000010
7950.0	29.3	-50.4		45.9	581.5	52.2	8.0	1.000010
8000.0	28.7	-50.0		44.7	581.9	55.9	8.5	1.000010
8050.0	28.0	-49.7		43.7	582.4	59.4	9.2	1.000010
8100.0	27.4	-49.3		42.6	582.8	62.3	10.0	1.000009
8150.0	26.8	-49.0		41.6	583.3	69.7	11.0	1.000009
8200.0	26.2	-48.7		40.6	583.7	80.5	12.6	1.000009
8250.0	25.6	-48.3		39.6	584.1	88.6	14.6	1.000009
8300.0	25.0	-48.0		38.7	584.6	95.3	16.1	1.000009
8350.0	24.4	-47.7		37.7	585.0	100.0	16.7	1.000008

GEODETIC COORDINATES
33.16712 LAT DEG
106.49511 LON DEG

UPPER AIR DATA
1210030029
JALLEN
TABLE 24 CONT

STATION ALTITUDE 4051.00 FEET MSL
1 MAY 81 0925 HRS MDT
ASCENSION NO. 29

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
84000.0	23.9	-47.3			36.8	585.5	114.4	17.8	1.000008
84500.0	23.3	-47.0			35.9	585.9	121.8	19.3	1.000008
85000.0	22.8	-46.6			35.1	586.3	122.8	17.2	1.000008
85500.0	22.3	-46.3			34.2	586.8	123.1	14.6	1.000008
86000.0	21.8	-46.0			33.4	587.2	123.4	11.9	1.000007
86500.0	21.3	-45.6			32.6	587.6	122.5	9.5	1.000007
87000.0	20.8	-45.3			31.8	588.1	118.1	7.6	1.000007
87500.0	20.3	-44.9			31.0	588.5	110.6	5.7	1.000007
88000.0	19.9	-44.5			30.3	589.1	96.2	3.9	1.000007
88500.0	19.4	-43.8			29.5	590.0	92.9	3.3	1.000007
89000.0	19.0	-43.1			28.8	590.8	93.0	2.8	1.000006
89500.0	18.6	-42.5			28.1	591.7	93.1	2.2	1.000006
90000.0	18.2	-41.8			27.4	592.6	84.7	2.1	1.000006
90500.0	17.8	-41.1			26.7	593.5	66.7	3.6	1.000006
91000.0	17.4	-40.4			26.0	594.3	59.3	5.1	1.000006
91500.0	17.0	-39.7			25.4	595.2	55.4	6.7	1.000006
92000.0	16.6	-39.0			24.7	596.1	69.3	8.8	1.000005
92500.0	16.3	-38.5			24.2	596.7	83.3	11.9	1.000005
93000.0	15.9	-38.4			23.6	596.9	91.2	15.4	1.000005
93500.0	15.6	-38.2			23.1	597.1			1.000005
94000.0	15.2	-38.1			22.6	597.3			1.000005
94500.0	14.9	-37.9			22.1	597.5			1.000005
95000.0	14.6	-37.7			21.6	597.7			1.000005
95500.0	14.3	-37.6			21.1	597.9			1.000005
96000.0	14.0	-37.4			20.6	598.1			1.000005

STATION ALTITUDE 4051.00 FEET MSL
1 MAY 81 0 025 HRS MDT
ASCENSION NO. 29

MANDATORY LEVELS
1210030029
JALLEN
TABLE 25

GEODETIC COORDINATES
33.16712 LAT UEG
106.49511 LON UEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4920.	21.0	9.6	48.	35.5	6.4
800.0	6628.	16.0	8.0	59.	60.4	9.4
750.0	8416.	12.2	5.1	62.	91.7	14.5
700.0	10302.	7.6	1.9	67.	99.6	8.8
650.0	12295.	3.5	1.8	88.	129.7	6.8
600.0	14410.	-2.1	-4.0	87.	145.1	13.8
550.0	16668.	-5.4	-9.0	76.	170.1	22.4
500.0	19103.	-10.1	-26.3	25.	130.9	24.5
450.0	21742.	-15.1	-32.0	22.	175.4	24.6
400.0	24629.	-22.0	-35.5	28.	188.2	20.6
350.0	27811.	-28.5	-41.7	27.	198.1	41.0
300.0	31369.	-37.6	-50.6	24.	203.5	36.6
250.0	35417.	-46.6			201.6	46.9
200.0	40178.	-54.9			211.8	60.8
175.0	42957.	-57.8			215.5	41.1
150.0	46122.	-61.5			217.4	40.8
125.0	49797.	-66.3			217.0	15.2
100.0	54273.	-65.2			194.7	6.0
80.0	58720.	-66.2			281.4	13.8
70.0	61374.	-66.5			285.2	18.3
60.0	64432.	-66.2			304.7	16.8
50.0	68096.	-61.8			69.4	6.8
40.0	72656.	-59.2			45.4	4.4
30.0	78670.	-50.7			48.3	7.6
25.0	82591.	-48.0			94.7	16.0
20.0	87454.	-44.7			102.6	4.5
15.0	93883.	-38.0				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

